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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,940	02/22/2002	Nobuyoshi Yazawa	15311	2191

7590 04/20/2005

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400 Garden City Plaza
Garden City, NY 11530

EXAMINER

CZEKAJ, DAVID J

ART UNIT PAPER NUMBER

2613

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/081,940	Applicant(s) YAZAWA ET AL.	
	Examiner Dave Czekaj	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/20, 2/22</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (5776049) in view of Takamura et al. (5876326), (hereinafter referred to as "Takamura").

Regarding claims 1 and 7, Takahashi discloses an apparatus that relates to a stereo endoscope (Takahashi: column 1, lines 10-12). This apparatus comprises "an imaging element arranged by airtightly joining an image optical unit to an imaging element unit through a tubular member" (Takahashi: figure 2a, wherein the imaging element are the CCD's, the image optical unit is the objective optical system comprising multiple lenses), "the imaging optical unit contains at least one optical lens" (Takahashi: figure 2a, wherein the image optical unit is the objective optical system comprising multiple lenses), "the imaging element unit contains at least one imaging element" (Takahashi: figure 2a, wherein the imaging element is the CCD), and "the imaging optical unit and the imaging element unit can change a distance or relative inclination" (Takahashi: column 7, lines 17-25, wherein the changing distance is accomplished by the driving means which move the CCD's along an optical

path). However, this apparatus lacks the bellows portion having an elastic force as claimed. Takamura teaches that in order to incorporate electromagnetic countermeasures into prior art endoscopes, many man-hours and steps are required (Takamura: column 2, lines 7-10). To help alleviate this problem, Takamura discloses an apparatus containing a "bellows portion having an elastic force" (Takamura: figure 14, item 152, column 12, lines 10-14, column 15, lines 46-54). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Takahashi and add the bellows member taught by Takamura in order to obtain an apparatus that requires less effort and steps for better protecting endoscopes against outside influences.

Regarding claims 2 and 8, Takahashi discloses "adjustment means for performing adjustment of the optical axis distance between both units" (Takahashi: figure 9a, column 7, lines 17-25, wherein adjustment of the optical axis is accomplished by the driving means which move the CCD's along an optical path).

Regarding claims 3 and 9, Takahashi discloses "the adjustment means includes a screw portion" (Takahashi: figure 4, wherein the screw portion is the screw (4)).

Regarding claims 4 and 10, Takahashi discloses "the adjustment means is disposed on the imaging element side" (Takahashi: figures 4-5, column 7, lines 17-25, wherein the imaging element side is the CCD side).

Regarding claims 5 and 11, although not disclosed, it would have been obvious to place the adjustment means on the imaging optical side (Official Notice). Doing so would have been obvious in order to make the system more versatile by having adjusting means on either side of the apparatus.

Regarding claims 6 and 12, Takamura discloses "the tubular member to which the bellows portion is formed is disposed to any one of the frame members constituting the imaging element unit or optical unit" (Takamura: figure 14, column 9, lines 46-48, wherein the tubular member is the insertion portion, the element unit is the CCD (128) shown to be housed within frame members).

Regarding claim 13, note the examiners rejection for claim 1, and in addition Takahashi discloses "a movable filter unit disposed between an imaging optical unit and an imaging element unit" (Takahashi: figure 2a, item 5, column 5, lines 47-61, wherein the filter unit is the optical system which filters the signal to provide a plurality of magnification levels) and "the movable filter unit includes a plurality of optical lenses" (Takahashi: figure 2a, column 5, lines 47-61, wherein the plurality of lenses are the power lens and compensating lens).

3. Claims 14 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi (5776049) in view of Takamura et al. (5876326), (hereinafter referred to as "Takamura") in further view of MacKinnon et al. (6110106), (hereinafter referred to as "MacKinnon").

Regarding claim 14, note the examiners rejection for claim 1, and in addition, claim 14 differs from claims 1 and 13 in that claim 14 further requires

adjustment pins for changeably disposing the openings or lenses of the filter unit. MacKinnon teaches that prior art imaging systems are bulky systems and have a limited dynamic range (MacKinnon: column 2, lines 8-15). To help alleviate this problem, MacKinnon discloses "adjustment pins for changeably disposing the openings or lenses of the filter unit" (MacKinnon: figures 3C-3F and 5-6, column 17, lines 50-55, wherein the adjustment pin is the thumb wheel). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Takahashi, add the bellows member taught by Takamura, and add the adjustment pins taught by MacKinnon in order to obtain an apparatus that operates more efficiently by being able to fine tune the amount of light that passes through a filter.

Regarding claims 16-17, Takahashi in view of Takamura in view of MacKinnon disclose "a filter disposed between the optical unit and element unit having at least one opening and a lens for transmitting light rays" (Takahashi: figure 2a, item 5, column 5, lines 47-61, wherein the filter unit is the optical system which filters the signal to provide a plurality of magnification levels; MacKinnon: figure 4A, column 18, lines 46-49, wherein the filter is the wavelength ratio scaling filter).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:


US-5090259	02-1992	Shishido et al.
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US-5577991	11-1996	Akui et al.
US-6117071	09-2000	Ito et al.
US-6807295	10-2004	Ono, Shuji
US-6826424	11-2004	Zeng et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (571) 272-7327. The examiner can normally be reached on Monday - Friday 9 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
ELECTRONIC BUSINESS CENTER 2000